

Work Order ID 119686

Tuesday, May 27, 2014 7:55:44 AM

119686

Page 1

Item ID: D3996-FE-832-EF

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Self-Clinching Fastener

Start Date: 5/15/2014 Start Qty: 75.00

75

Cust Item ID:

Required Date: 5/15/2014 Req'd Qty: 75.00

75

Customer:

Reference:

Approvals:

Process Plan:

CLDate: 14/05/27

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3996

A

100

0.00

100

Purchasing

Purchasing

Memo

Issue P/O:

24179

Purchase Part Number: FE-832-EF

Supplier: Interfast Inc.

Certificate of conformity is required

0.00

CL 14/05/27

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.00

14/6/12 (75)

Work Order ID 119686

119686

Page 2

May-15-14 3:37:12 PM

Item ID: D3996-FE-832-EF

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Self-Clinching Fastener

Start Date: 5/15/14 Start Qty: 50.00

50

Cust Item ID:

Required Date: 5/15/14 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC6- Inspect dimensions to drawing

0.00

DAS

27

9-89

120

QC

Memo

0.00

Quality Control

130

Identify as per dwg & Stock Location: GA

0.00

130

Packaging

Memo

0.00

Packaging

75x

DAS
28
9-89

JUN 13 2014

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

MLJ 14-06-16

W4-0613

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Picklist Print

May-15-14 3:37:16 PM

Page 1

Work Order ID: 119686

119686

Parent Item: D3996-FE-832-EF

D3996-FE-832-EF

Parent Item Name: Self-Clinching Fastener

Start Date: 5/15/14

Required Date: 5/15/14

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP RevA: new issue 09.11.11 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
FE-832-EF		Purchased	No			110	Each	0.0000	1	50.00			
FF-832-EF									**	75			
PEM Insert													

Rec'd 5/12/14 (75)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

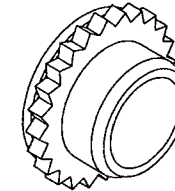
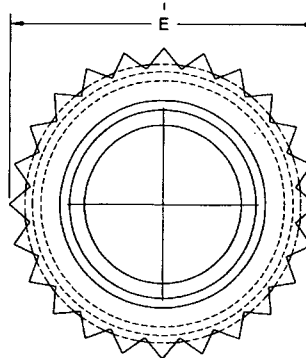
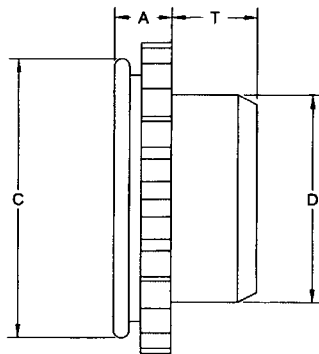
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Crosstube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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SPECIFICATION CONTROL DRAWING



D3996-XXX-YYY-ZZZ SELF-CLINCHING FASTENER

THREAD SIZE	THREAD CODE ("YYY")	TYPE ("XXX")	A MAX (SHANK)	SHEET THICKNESS	C +0.000 -0.005	D MAX	E ±0.005	T +0.015 -0.000	HOLE SIZE IN SHEET +0.003/-0.000	MIN DIST. HOLE CL TO EDGE	WEIGHT lb
#4-40 (0.112)	440	FEO	0.040	0.039-0.045	0.171	0.145	0.192	0.065	0.172	0.14	0.00031
		FE	0.060	0.059-0.070							0.00037
#6-32 (0.138)	632	FEO	0.040	0.039-0.045	0.212	0.180	0.244	0.075	0.213	0.17	0.00047
		FE	0.060	0.059-0.070							0.00068
#8-32 (0.164)	832	FEO	0.040	0.039-0.045	0.289	0.215	0.322	0.090	0.290	0.20	0.00098
		FE	0.060	0.059-0.070							0.00124
#10-32 (0.190)	032	FEO	0.040	0.039-0.045	0.289	0.245	0.322	0.110	0.290	0.20	0.00104
		FE	0.060	0.059-0.070							0.00120
1/4-28	0428	FE	0.060	0.059-0.070	0.343	0.318	0.384	0.120	0.344	0.28	0.00158

NOTES

1) SPECIFICATION: PENNENGINEERING (PEM) MINIATURE SELF-CLINCHING FASTENER, SELF-LOCKING
PEM P/N XXX-YYY-ZZZ

WHERE "XXX" = TYPE "FEO" (SHORT SHANK) OR "FE" (LONG SHANK) PER TABLE

"YYY" = THREAD CODE PER TABLE

"ZZZ" = FINISH CODE PER NOTE 2 BELOW

FOR EXAMPLE, #8-32 THREAD, LONG SHANK, ELECTRO-FILM FINISH:

DART P/N = D3996-FE-832-EF

PEM P/N = FE-832-EF

2) FINISH: FINISH CODE ("ZZZ") PER THE FOLLOWING:

"C" = CADMIUM YELLOW CHROMATE PER ASTM B766 CLASS 5 TYPE II

"CI" = CADMIUM CLEAR CHROMATE PER ASTM B766 CLASS 5, TYPE III

"EF" = ELECTRO-FILM PER MIL-PRF-46010

"MD" = MOLYBDENUM DISULFIDE DRY FILM (STD PEM FINISH)

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: N/A

7) WEIGHT: N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 119686 MWS

1405-23

RELEASED
2009-11-08

A	NEW ISSUE	DESCRIPTION	CP	09.10.01
REV.			BY	DATE
DESIGN				
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	09.10.01			

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D3996
REV. A
SHEET 1 OF 1

TITLE
SELF-CLINCHING FASTENER
SCALE
NTS

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

OUTSTANDING PO REPRINT

Purchase Order ID PO24179

Purchase Order Date 5/12/2014

PO Print Date 5/28/2014

Page Number 1 of 3

Order From : VU-BEA001

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

Ship To : DART AEROSPACE LTD

1270
ABERD
EEN
HAWKE
SBURY,
ON
K6A
1K7
CANAD
A

Contact Name

Vendor Phone 305-925-2600

Vendor Fax 305-507-7191

Ship To Contact

Ship To Phone

Ship Method FedEx PI collect

Ship Acct

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB FCA - (Free Carrier)

Line Nbr	Item ID Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Extended Price
6	FE-832-EF	PEM Insert	5/19/2014 Yes 2014 12:50:00	75.00 Each	\$20.78

B119686

Line Total: \$20.78

5/14/2014



B/E Aerospace, Inc.

CONSUMABLES MANAGEMENT

Tel: +1.305.925.2600 • Fax: +1.305.507.7191 • www.beconsumables.com
Remit to Address: 88289 Expedite Way, Chicago, IL 60695-0001
Wire Instructions: B/E Aerospace Consumables Management • JPMorgan Chase Bank New York
ABA: 021000021 • Account: 304639273 • SWIFT: CHASUS33 • CHIP UID: 0002



INVOICE NUMBER

HTWANE

PAGE 1 OF 1

SEND TO ACCOUNTING

SOLD TO:

002409
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON
CANADA K6A 1K7

SHIP TO:

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON
CANADA K6A 1K7



ORDER NO. PO24179		DATE 06/11/14	SHIP VIA FEDX INTL P1 COLL		TERMS NET 45		SHIPPING TERMS FOB-MIAMI		
ITEM NO.	QUANTITY ORDERED	PART NUMBER AND DESCRIPTION			PRICE	UNIT	BACK ORDER	SHIPPED	AMOUNT
6	75	FE-832-EF NUT ECCN :9A991 Country Origin: USA TARIFF: 7318.16.0060 MFR: PENN ENG & MFG. CTRL# : 2011K17746 LOT# : 967516 LOT QTY: 75 COUNTRY OF ORIGIN: USA Country of Origin: USA <i>These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.</i> *** SHIPPED 1 CTN *** # 1=CTN 7# 0 OZ. 607561325650 FREIGHT ACCT# 15179324-0			0.28	EA	0	75	21.00
							SUBTOTAL :		21.00
							HANDLING :		0.00
							DISC/ALL :		0.00
							INCM FRT :		0.00
							FREIGHT :		0.00
							TOTAL :		21.00USD
									U.S. CURRENCY
MATERIAL TO BE RETURNED MUST HAVE PRIOR AUTHORIZATION BY B/E AEROSPACE									

ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE.

SHIPPED FROM: 10000 NW 15 TERRACE, MIAMI, FL 33172



ORIGINAL INVOICE

BY RECEIVING DELIVERY OF THE ITEMS COVERED BY THIS INVOICE, BUYER AGREES TO THE TERMS AND CONDITIONS OF SALE AT:
www.beconsumables.com/cm/docs/BE_CM_Conditions_of_Sale.pdf



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO24179

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
6	75	EA	PE-832-EP		967516	PENN ENG & MFG.	46384		


Jason Lewis
Vice President of Quality

06/11/14



Corporate Office
5190 Old Easton Road
Danboro, PA 18916 USA
Tel: 215-766-8853
Fax: 215-768-0143
www.pennet.com



PICK LIST

SOLD TO:

TOWER FASTENERS CO. INC.
1690 NORTH OCEAN AVENUE
HOLTSVILLE NY 11742-1823

SHIP TO:

TOWER FASTENERS CO. INC.
1690 NORTH OCEAN AVENUE
HOLTSVILLE NY 11742-1823

9

CUSTOMER P.O. NO. 4197328-181	SHIP INSTRUCTIONS UPS ACCT 153-547	OUR ORD. NO. 1244638 80	ORDER DATE 8/5/2011 03:38:04	ORDER TAKEN BY TFRAY	CUSTOMER NO. 48141	DATE PRINTED 8/13/2011 5:03:45	PICK SLIP NO. 1355494
----------------------------------	---------------------------------------	----------------------------	------------------------------------	-------------------------	-----------------------	--------------------------------------	--------------------------

SHIP VIA UPS UP TO 20 CARTONS, OVER 20 CARTONS FROM NC SHIP VIA JP EXPRESS
OVER 20 CARTONS FROM PA SHIP VIA JP EXPRESS, EXCEPT TO TEXAS SHIP VIA UPS FREIGHT

LINE	ITEM	DESCRIPTION	DATE	QUANTITY	SHIP VIA
1	FE-332-EP-D	NUT, MINILOCK 8-32THREAD, DFARS	9/30/2011 10/14/2011	10,080 -10000-EA 10,080 371508	Motor Freight

RECEIVED
NOV 08 2011
Tower Fasteners



END OF ORDER

PEN FASTENING SYSTEMS

a PennEngineering® company

5190 Old Easton Road • Danboro, PA 18916 • Tel: 215-766-8853 • www.pennet.com

PART NUMBER: FE-832EF

LOT NUMBER: 967516

QUANTITY: 10080

The PEN® Standard Insert Fastener is a proprietary product with specifications and performance characteristics as set forth in our published literature. This certificate asserts that the fasteners supplied under this order are in full compliance with these specifications and performance requirements. Quality information, including statistical control data, is on file at our manufacturing location to support this certification.

All of these records, techniques, and specifications are not necessarily in compliance with the complete terms of your order; however, the information contained on your specifications and drawings has been taken from our bulletin describing these fasteners, and to that end we certify that these fasteners will meet all specifications and requirements of that bulletin. Objective quality evidence substantiating this statement is on file at our facility.

We further certify that no mercury, mercury compounds, or polychlorinated biphenyls (PCBs) have been used in the manufacture or processing of this fastener.

PENN ENGINEERING & MANUFACTURING CORP.

Sincerely,



Orie V. Kristel III
Director of Quality



Tower Fasteners Co., Inc.
1690 North Ocean Ave
Holtsville, NY 11742
USA
www.towerfast.com

PACKING LIST



Invoice Number	
3196427	
Invoice Date	Page
11/15/2011 11:35:02	1 of 2
PO Number	Order Number
0ASV57	1410453



Bill To:

B/E Aerospace Consumables Management
P.O. Box 025263
Miami, FL 331025263
USA
201-265-8770

Ship To:

B/E Aerospace Consumables Management
B/E Aerospace Consumables Management
9835 NW 14th Street
Miami, FL 33172
US

Customer ID: 20698

PO Number	Order Date	Pick Ticket No	Primary Salesrep Name	Taker	
0ASV57	8/4/2011 11:10:49	2193082	Florida. Sales	SHAWD	
Carrier	Carrier Tracking Number	Terms Description	Net Due Date	Disc Due Date	Discount Amount
FedEx Ground	011769210161265	NET 30 DAYS	12/15/2011	12/15/2011	
Quantities				Item ID	UOM
Ordered	Shipped	Remaining	Disp.	Item Description	Unit Size

Delivery Instructions: FEDX # 0331-0149-0

Carrier: R02-FedEx Ground

Tracking #: 011769210161265

10,000 10,000 0 (002) /FE-832EF EA 1.0
PEM SELF CLINCHING MINIATURE FASTENERS



10/17 Pem ship to us 10/28
11/1 per Tom w/s 11/4 to us

Order Line Notes: MFG CERT REQUIRED
DFAR CERT REQUIRED
MATERIAL CERT REQUIRED

Lot Number: 371508

Qty: 10,000 EA

Country Of Origin: US
Manufacturer Lot #: 1306/967516
Manufacturer Name: PEM ENG.
RoHS Compliant: YES

Contract Bin:

80 80 0 (003) /FE-832EF EA 1.0
PEM SELF CLINCHING MINIATURE FASTENERS



PEM SELF CLINCHING MINIATURE
FASTENERS

Order Line Notes: MFG CERT REQUIRED
DFAR CERT REQUIRED
MATERIAL CERT REQUIRED



Tower Fasteners Co., Inc.
1690 North Ocean Ave
Holtsville, NY 11742
USA
www.towerfast.com

PACKING LIST

Invoice Number	
3196427	
Invoice Date	Page
11/15/2011 11:35:02	2 of 2
PO Number	Order Number
0ASV57	1410453

Quantities				Item ID	UOM
Ordered	Shipped	Remaining	Disp.	Item Description	Unit Size

Lot Number: 371508

Qty: 80 EA

Country Of Origin: US
Manufacturer Lot #: 1306/967516
Manufacturer Name: PEM ENG.
RoHS Compliant: YES

Contract Bin:

Total Pieces: 10080 Total Lines: 2 Total Weight: 11.3954

Items listed herein identified as RoHS are in compliance with the European Directive 2002/95/EC Restriction of Hazardous Substances

CERTIFICATE OF COMPLIANCE

DISCREPANT MATERIAL TO BE RETURNED MUST HAVE PRIOR AUTHORIZATION
ALL ITEMS MUST BE RETURNED IN THEIR ORIGINAL PACKAGING

Tower Fasteners hereby certifies that the items furnished on this order were produced in accordance with the specified requirements or military specifications. Tower Fasteners accepts no responsibility for the manufacturing or functional defects and limits express or implied warranties to the cost of replacing product supplied.


Quality Control Manager

Terms And Conditions

Shipments

Unless previously noted or agreed to otherwise, Tower Fasteners reserves the option to maintain a +/- 10% shipping policy on all orders.
All payments are Net 30 days unless specifically noted on orders.
All returns of product must be accompanied by a Tower Fasteners RMA# and are subject to inspection/confirmation before adjustments/credits are issued.
All items noted as Non Cancellable, Non Returnable (NCNR) cannot be cancelled or returned.
Receipt of this document confirms acceptance of the above terms and conditions.

CERTIFICATE OF TESTS

ABNAHMEPRUEFZEUGNIS

CERTIFICAT DE CONTROLE

CERT SERIAL# 000772015



CARPENTER

Carpenter Technology Corporation
101 West Bern Street, Reading, Pa. 19601
Tel: (610) 208-2000 (800) 338-4592

- THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47
- THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.
- MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
- THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

08/26/11

CUSTOMER/BESTELLER/CLIENT

SELER/VERKAUFER/VENDEURPAGE 1 OF 1

PENNINGENGINEERING FASTENING TECHNOLOGIES
BETTY ANDREWS
2400 LOWERY STREET
WINSTON SALEM, NC 27101

Lot # 42917

42924

CARPENTER TECHNOLOGY CORP

101 W. BERN STREET
READING, PA 19601

CUSTOMER ORDER NO./BESTELL-NR./N° DE COMMANDE	CARPENTER NO./WERKS-NR./N° DE REFERENCE INTERNE	DATE/DATUM/DATE	WEIGHT/GEWICHT/POIDS
902079WS LINE 5	PHL011505 L28716	08/26/11	4002.000

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE: 741360

PRODUCT DESCRIPTION: CARPENTER STNLS TYPE 303 LOW MAG PERM ANL COLD WORKED GROUND

SPECIFICATION: PENNINGIN 1-30-0303 REV E EXCPT LTR (01/30/09) PENDING
ASTM-A582-05

SIZE 0.343750 IN. (8.73 MM) RD BAR

PRIMARY HEAT CHEMISTRY (WT%): (TEST METHOD IS SHOWN IN PARENTHESIS)

C (COM)	MN (XRF)	SI (XRF)	P (XRF)	S (COM)	CR (XRF)
0.066	1.62	0.52	0.03	0.34	17.65
NI (XRF)					
9.47					

MAGNETIC PERMEABILITY <1.20

EDDY CURRENT TESTED AND APPROVED

HARDNESS AS SHIPPED, HRBW 97 (MIDRADIUS)

(T)RANSVERSE (L)ONGITUDINAL	
YIELD STRENGTH (0.20 %) KSI(MPA)	72.0 (496)
TENSILE STRENGTH, KSI(MPA)	105.0 (724)
ELONGATION IN 1.40", %	36.0
REDUCTION OF AREA, %	36.0

MATERIAL PRODUCED ON THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. MATERIAL HAS BEEN MELTED IN USA OR QUALIFYING COUNTRY TO DFARS REQUIREMENTS 252.225-7014 WITH ALTERNATE 1 FOR QUALIFYING COUNTRY 225.872.1 SUPERSEDED BY DFARS REQUIREMENTS DFARS 252.225-7008 AND 252.225-7009. THIS ORDER WAS MANUFACTURED IN ACCORDANCE WITH CARPENTER SPECIALTY ALLOYS OPERATIONS QUALITY PROGRAM MANUAL, REVISION 29 DATED 09/01/10.

CARPENTER'S QUALITY MANAGEMENT SYSTEM WAS REGISTERED AS OF NOVEMBER 24, 2010 TO THE REQUIREMENTS OF ISO 9001:2008 APPROVAL CERTIFICATE 10-1385R BY PERFORMANCE REVIEW INSTITUTE. CERTIFICATE OF TEST IS PREPARED IN ACCORDANCE WITH PARAGRAPH 3.1 OF EN 10204 (DIN 50049). WE HEREBY CERTIFY THAT THE ABOVE TEST DATA ARE IN ACCORDANCE WITH THE PURCHASE ORDER AND SPECIFICATION REQUIREMENTS.

Lot # 967516
DN # FE-832-EF-D
130030303430-X
#1170

STEPHANIE B. MCCULLUM
QUALITY ASSURANCE ENGINEER
CARPENTER TECHNOLOGY CORPORATION

Stephanie B. McCullum

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.
Die vorliegende Zertifikatierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keinerlei Haftung für die aus diesem Zertifikat resultierenden Aussagen.
Ce certificat est uniquement valable pour le client dont le nom est imprimé sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce partie.

of 1

Form 1: Part Number Accountability

1. Part Number 54853-4	2. Part Name NUT, SELF-CLINCHING, SELF-LOCKING	3. Serial Number N/A	4. FAI Report Number 2011K17746
5. Part Revision Level L	6. Drawing Number 54853	7. Drawing revision level L	8. Additional Changes N/A
9. Manufacturing Process Reference 967516	10. Organization Name B/E Aerospace Consumables Management	11. Supplier Code 16209	12. P.O. Number & Line Item 6360623
13. Detail or Assembly FAI Detail	14. Full or Partial FAI <div style="display: flex; justify-content: space-between;"> Full Baseline Part Number including revision level N/A </div> <hr style="border-top: 1px dashed black;"/> Reason for partial FAI: N/A		
a) if above part number is a detail part only, go to Field 19 b) if above part number is an assembly, go to the "INDEX" section below.			
INDEX of part number or sub-assembly number required to make the assembly noted above.			
15. Part Number FE-832-EF	16. Part Name PEM SELF CLINCHING MINIATURE FASTENERS	17. Part Serial Number N/A	18. FAI Report Number LOT# 967516
1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 5.4: <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <small>ONE 251 INSP</small> </div> <div>FAI complete</div> <div>FAI not Complete</div> </div>			
19. Signature RANDAL CLARK <i>Randal Clark</i>			20. Date 12/04/2012
21. Reviewed by <i>Ray Greco</i> <i>Ray Greco</i>			22. Date 12/4/12
23. Customer Approval			24. Date

**Form 2: Product Accountability – Raw Material, Specifications and Special Process(s),
Functional Testing**

1. Part Number 54853-4	2. Part Name NUT, SELF-CLINCHING, SELF-		3. Serial Number N/A		4. FAI Report Number 2011K17746
5. Material or Process Name	6. Specification Number	7. Code	8. Special Process Supplier Code	9. Customer Approval Verification (Yes/No/NA)	10. Certificate of Conformance Number
STAINLESS STEEL MATERIAL	AISI 303-S/S	N/A	CARPENTER TECHNOLOGY CORPORATION 101 WEST BERN ST READING, PA 19601	N/A	HT# 741360
BLACK DRY FILM LUBE OVER CAMIUM CHROMATE PRIME	AISI 303-S/S	N/A	PEM FASTENING SYSTEMS - A PENN ENGINEERING COMPANY 5190 OLD EASTON RD DANBORO, PA 18916	N/A	LOT# 967516
11. Functional Test Procedure Number	12. Acceptance report number, if applicable				
N/A	N/A				
13. Comments N/A					
14. Prepared By	BIC 251 RANDAL CLARK		15. Date 12/04/2012		



AS/EN/SJAC 9102 Rev A/ASQR-01 Aerospace Supplier Quality Requirements
Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

3

1. Part Number 54853-4				2. Part Name NUT, SELF-CLINCHING, SELF-LOCKING			3. Serial Number N/A	4. FAI Report 2011K17746
Characteristic Accountability				Inspection / Test Results				
5. Char No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designed Tooling	11. Non-Conformance Number	14 FAI Inspection Measuring Equipment	14 FAI Inspector Identification
1	S1 D-8	Minor	Note: INTERPRET DRAWING PER DOD-STD-100 AND SUNDSTRAND EN10.16-13	ACCEPT	NA	NA	SPECIFICATION	RCL
2	S1 D-7	Minor	Note: CLASSIFICATION OF CHARACTERISTICS PER SUNDSTRAND QC13.01-03, CLASS [4]	ACCEPT	NA	NA	SPECIFICATION	RCL
3	S1 D-7	Minor	Note: FINISH: BLACK DRY FILM LUBRICATE OVER CADMIUM CHROMATE PRIME	ACCEPT	NA	NA	CERTIFICATION	RCL
4	S1 D-7	Minor	Note: MATERIAL: A.I.S.I. NO 303 STAINLESS STEEL	ACCEPT	NA	NA	CERTIFICATION	RCL
5	S1 C-7	Minor	Note: SUPPLEMENTAL SHEET LISTS ONLY THE APPLICATION(S) AND PROCUREMENT OFFICE(S)	CONFORMS	NA	NA	INFORMATIONAL	RCL
6	S1 C-7	Minor	Note: FINISH: PASSIVATED PLUS CLEAR DRY FILM LUBRICANT	N/A	NA	NA	N/A	RCL
7	S1 C-7	Minor	Note: MARK NUMBER 99167SOCN54853 (PLUS APPLICABLE DASH NUMBER) PER MIL-STD-130 (SUNDSTRAND PN17.50, METHOD 8 OR 9)	ACCEPT	NA	NA	VISUAL/PHOTO	RCL
8	S1 C-7	Minor	Note: ALL DIMENSIONS ARE IN INCHES	CONFORMS	NA	NA	INFORMATIONAL	RCL

9	S1 B-7	Minor	Note: FORMAL QUALIFICATION OF THE DESIGN SHOWN HEREON IS BASED UPON PROVEN DETAIL FABRICATION TO SPECIFIED SUNDSTRAND SPECIAL PROCESS AND MATERIAL SPECIFICATIONS/STANDARDS . MILITARY SPECIFICATIONS/ STANDARDS INDICATED AS ALTERNATES FOR DESIGNATED SUNDSTRAND SPECIFICATIONS/STANDARDS	CONFORMS	NA	NA	INFORMATIONAL	RCL
10	S1 B-8	Minor	Note: APPROVED SOURCE(S) OF SUPPLY:	CONFORMS	NA	NA	INFORMATIONAL	RCL
11	S1 D-5	Minor	Linear Dimension: <= .060 in	.0595	NA	NA	CALIPER	RCL
12	S1 D-5	Minor	Thickness: >= .060 in	CONFORMS	NA	NA	INFORMATIONAL	RCL
13	S1 D-5	Minor	Note: RECOMMENDED HOLE SIZE: .290 +.003 -.000	CONFORMS	NA	NA	INFORMATIONAL	RCL
14	S1 D-4	Minor	Diameter: .289 +.000 -.005, in	.2885	NA	NA	CALIPER	RCL
15	S1 D-4	Minor	Diameter: <= .215 in	.204	NA	NA	CALIPER	RCL
16	S1 D-4	Minor	Diameter: .322 +/- .010 in	.319	NA	NA	CALIPER	RCL
17	S1 D-4	Minor	Linear Dimension: .105 +/- .015 in	.101	NA	NA	CALIPER	RCL
18	S1 D-3	Minor	Linear Dimension: >= .203 in	CONFORMS	NA	NA	INFORMATIONAL	RCL
The signature indicates that all characteristics are accounted for and meet drawing requirements or are properly documented for disposition.								
12. Prepared By RANDAL CLARK							13. Date 12/04/2012	



Cust PO (K) 6360623



INVENTORY MATERIAL

PACKAGE 1 of 1

Supplier ID: V1592

Cust Part#(P) 54853 - 4



MADE IN USA
B/E Item: FE - 832 - EF
NUT

9916750CN

Revision (R) L

Quantity (Q) 1



CTRL#: 2011K17746



MFG: PENN ENG & MFG.

Supplier Ref (4S) 86F825 - 1

Traveler (T)



From:
B/E Aerospace
660 LONGBEACH BLVD
STRATFORD, CT 06615
201 - 265 - 8770

To:
HAMILTON SUNDSTRAND COM 6
4747 HARRISON AVE
ROCKFORD, IL 61108

ERIE PLATING CO.

XCELLENCE IN PLATING

CERTIFICATION

11/5/2012

656 WEST 12th STREET
ERIE, PENNSYLVANIA 16501
PHONE (814) 453-7531 FAX (814) 455-9103
E-mail: epco@erleplating.com
Web Site: www.erleplating.com

PEM FASTENING SYSTEMS - NC
2400 LOWERY STREET
WINSTON-SALEM, NC 27101

Part ID: FE-832-EF-D CAD YEL,SAND, #099, PREVOX 510 ON SS
Revision:
EPCO Work Order: 748338
Customer PO: 967516
Quantity: 10800.0 Pieces

IT IS HEREBY CERTIFIED THAT ALL the articles mentioned above are in conformance with the requirements, specifications, and drawings as listed on customer work order 967516 issued by PENN ENGINEERING & MFG..

Records substantiating the above are available in our files for inspection by authorized personnel.

SPECIFICATIONS

By: C. J. Wall

Signature

CHRIS WALLEN

Name

Title: CSM



Chamber of Commerce



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75 Years
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IN ERIE

2011K17746

ERIE PLATING CO.

XCELLENCE IN PLATING

CERTIFICATION

11/5/2012

656 WEST 12th STREET
ERIE, PENNSYLVANIA 16501
PHONE (814) 453-7531 FAX (814) 455-9103
E-mail: epco@erieplating.com
Web Site: www.erieplating.com

PEM FASTENING SYSTEMS - NC
2400 LOWERY STREET
WINSTON-SALEM, NC 27101

Part ID: FE-832-EF-D CAD YEL,SAND. #099, PREVOX 510 ON SS
Revision:
EPCO Work Order: 748338
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SPECIFICATIONS

By:

C. J. Wall
Signature

CERIS WALAN
Name

Title:

Csm



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IN ERIE